MRAD 202 – Patient Care 2

What is Situational Awareness?

Situational awareness or situation awareness (SA) refers to an individual's perception of environmental elements within the volume of time and space, the comprehension of their meaning and the projection of their status in the near future.

SA is essentially what psychologists call **perception or attention**. In essence, SA involves continuously monitoring what is happening in the task environment in order to understand whatis going on and what might happen in the next minutes or hours.

History of SA in healthcare

Until the mid-1990s, SA was used primarily in the aerospace sector. This began to change when an article on SA in anesthesiology was published in a special issue of the *Human Factors*journal devoted to SA (Gaba, Howard, & Small, 1995). From this point on, the healthcare industry began to adopt SA as an essential aspect of modern healthcare.

Today, the World Health Organization (WHO) considers good SA to be "critical in all areas of healthcare, especially in acute medicine" where prompt reactions to changing patient conditionsis essential (2009, p. 30).

The **key factors of** SA are:

- Get information
- Understand the information
- Think ahead

Get Information

The most fundamental and essential activity is first getting information about the situation. Toensure you are getting all the information you need when you need it, consider the following:

- **The Nature of the Information:** This includes assessing the situational "elements," including the Patient, Environment, Task and Time (PETT). Also consider whether the elements are **static**

or **continuously dynamic** and changing. Will any of these elementschange rapidly? Static information requires you to gather it only once, and maybe refresh your memory occasionally. Dynamic elements require you to be observant and aware of changing details, which could include or affect the patient's condition.

- **Information Delivery:** You will collect information in either a **passive or active** manner. Checking vital signs and asking other healthcare providers for information are both active ways of gathering info. It is important that you don't rely **only** on passive info delivered to you; sometimes a few questions asked can make a big difference to the patient and your approach to their care.

- **Information Source:** Information can come from a number of sources, such as **People, Tools, Devices** and **Documents**. People include the patient and other healthcare workers.

- **Collecting the Information:** How do you acquire the necessary info?
  - **Scan and search:** Be proactive in seeking info from environment and people around you.
  - **Pay attention:** Be observant of elements around you.
  - **Remain watchful:** Elements and situations change rapidly. Be aware and expectthe unexpected.
  - **Communicate:** Healthcare is a team effort. Verbalize thoughts and communicatewith coworkers and the patient when relevant. You are a source of info for others

Understand the Information

It is not enough to just gather the information: you must comprehend **or assign meaning to the gathered information**. The elements must be assessed and considered within a larger framework in order for you to form a **comprehensive picture of the situation** that will inform decision making.

- **Understanding and assigning meaning**
  - **Compare** the info to your existing knowledge of the situation. Is the new info what you expected it to be? Does it change your approach or plan?
  - **Critique** the information you collected. Check integrity of information (accuracy, completeness, source and relevance).
  - **Diagnose** the info by considering its meaning and relevance to current situations.

Think Ahead

Once the information has been gathered and understood, it must be used to draw conclusions about the situation's status in the short-, mid- and long-term. Consider how various factors and/or elemental changes could affect the situation. What will be the outcome if the current conditions remain the same? Ask "what if?" and communicate the potential outcomes/situationsto others around you.

Potential Challenges to Satisfactory SA

Several factors, both **direct** and **indirect**, can be a barrier to adequate SA, such as:

- Increased workload
- Frustrations
- Stress
- Interruptions and distractions

A number of factors can combine with human capabilities and limitations to result in possible obstacles to situational awareness. See Gasaway (n.d.) for further exploration of barriers to SA.

References

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